RE: Exceptional Events Report

Andy Hawkins to: Tom Gross

06/14/2012 08:16

AM

From: Andy Hawkins/R7/USEPA/US

To: Tom Gross <TGross@kdheks.gov>

Too bad OK is not pursuing the flag in Oklahoma City area as it would add to your case. On the trajectories for that day I was wondering if some of the higher level trajectories curved back to the SW from Oklahoma City towards the OK and TX fires that show up in the burn map (again I can't see them).... this would also help support your case for the 29th. You might even do some back trajectories from the Oklahoma city monitors trying to tie burning to these high ozone readings there and then make a case that the transport of precursors and ozone from fires impacting this area to Wichita occurred... just my initial thought anyway when I first glanced at the analysis.

Andy Hawkins
U.S. Environmental Protection Agency Region 7
Air and Waste Management Division
Air Planning and Development Branch
901 N. 5th Street
Kansas City, KS 66101

Phone: (913) 551-7179 Fax: (913) 551-9179

Email: hawkins.andy@epa.gov

Tom Gross ---06/14/2012 07:56:18 AM---Thanks Andy, I don't think Ok is going to request on those days, have not heard for sure

From: Tom Gross <TGross@kdheks.gov>
To: Andy Hawkins/R7/USEPA/US@EPA

Date: 06/14/2012 07:56 AM

Thanks Andy,

I don't think Ok is going to request on those days, have not heard for sure

We used a tiered approach to determine acres burned based on the quality of the data available..... we looked at satellite imagery where we had good days to do so. Looked at met conditions to see if days in between clear days were OK to burn....rain etc... looked at county burn acres reported (these tended to be low). All told, we were able to develop data for most days using this triage approach. We believe our results are much better than Smartfire. I think Smartfire was consistently lower. Will check and confirm. Take care

Tom

Thomas Gross
Bureau of Air
Kansas Department of Health and Environment
1000 SW Jackson, Suite 310
Topeka, Kansas 66612
(785) 296-1692

Notice of Confidentiality

This transmission contains information that may be confidential and privileged. Unless you are the intended recipient of the message (or authorized to receive it for the intended recipient), you may not copy, forward, or otherwise use it, or disclose its contents to anyone else. If you have received this transmission in error, please notify me immediately and delete it from your system.

From: Andy Hawkins [mailto:Hawkins.Andy@epamail.epa.gov]

Sent: Wednesday, June 13, 2012 1:40 PM

To: Tom Gross

Subject: Fw: Exceptional Events Report

FYI

Andy Hawkins

U.S. Environmental Protection Agency Region 7 Air and Waste Management Division Air Planning and Development Branch 901 N. 5th Street Kansas City, KS 66101

Phone: (913) 551-7179 Fax: (913) 551-9179

Email: hawkins.andy@epa.gov

----- Forwarded by Andy Hawkins/R7/USEPA/US on 06/13/2012 01:36 PM -----

From: Joshua Tapp/R7/USEPA/US
To: Andy Hawkins/R7/USEPA/US@EPA

Date: 06/13/2012 01:23 PM

Subject: Re: FW: Exceptional Events Report

Hi Andy,

Thanks for starting your review. These are ok to send but pls be sure to let him know that add'l comments will follow next week.

Jt

Joshua A. Tapp, Chief Air Planning Branch EPA Region 7 901 N. 5th Street Kansas City, KS 66101 tapp.joshua@epa.gov 913.551.7606 Office 913.948.2443 Cell

From: Andy Hawkins/R7/USEPA/US
To: Joshua Tapp/R7/USEPA/US@EPA

Date: 06/13/2012 12:58 PM

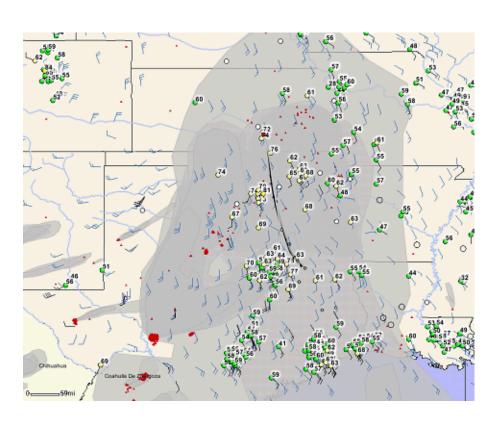
Subject: Re: FW: Exceptional Events Report

Josh, I was going to send this to Tom... thought I would run it by you first...

Tom,

Some informal (not official EPA comments) initial thoughts for you to consider.

I must be getting old... I can't see trajectory heights 2 and 3 on these trajectory plots... Also, I'm struggling to see how you differentiate between ozone transport from Oklahoma City to Wichita and the smoke contribution on this day, especially given the lower ozone readings in other areas that look to be in the smoke plume in this image. Anyway the trajectories at the heights 2&3 are difficult to see in all the images. Maybe you could also provide the raw graphics that might be at a higher resolution... or I need a bigger monitor and better spectacles.



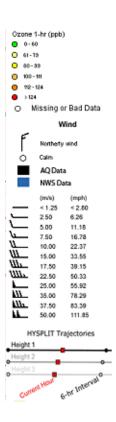


Figure A-46. 24-hour backward HYSPLIT trajectories ending at 19:00 on April 29, 2011.

Do you know if OK is requesting a flag for ozone data on April 29th? In the text it mentions Mexico fires on this day but I'm not seeing the impact in other areas in OK and TX from Mexico fires in this image anyway. It looks like some OK/TX fires may have played a role in Oklahoma City.

What is the "KDHE method" for determining acres burned and the spatial location of those emissions? How does the KDHE estimate compare to the SMARTFIRE estimate?

Could a map (or animation) of fire related emissions for NOx and VOC used in the bluesky modeling be included and maybe contrasted to emissions in the no burning modeling scenario?

In table 6-8 modeling is used to estimate the peak impacts from flinthills fires. So at the HD the peak impact from flinghills fires is estimated at 20ppb. In table 1-2 the estimated range is 20-28ppb. How are the estimated concentrations in table 1-2 derived (looks like modeling and matching day combined?) Do you place a higher weight on one estimate over the other?

The Konza CASNET site contains solar radiation information data. Might be interesting to see that variable comparison in your matching day analysis for this site.

Andy Hawkins

U.S. Environmental Protection Agency Region 7 Air and Waste Management Division Air Planning and Development Branch 901 N. 5th Street Kansas City, KS 66101

Phone: (913) 551-7179 Fax: (913) 551-9179

Email: hawkins.andy@epa.gov

From: Tom Gross <TGross@kdheks.gov>

To: Joshua Tapp/R7/USEPA/US@EPA, Andy Hawkins/R7/USEPA/US@EPA

Date: 06/11/2012 02:33 PM

Subject: FW: Exceptional Events Report

Josh, Andy

This is hot off the presses. We are still giving it the initial look. Please do not spread it around. What I am after is help in our comments back to Sonoma. It does not include the pieces we are doing that I think is in Chapter 3.

Tom

Thomas Gross Bureau of Air Kansas Department of Health and Environment 1000 SW Jackson, Suite 310 Topeka, Kansas 66612 (785) 296-1692

Notice of Confidentiality

This transmission contains information that may be confidential and privileged. Unless you are the intended recipient of the message (or authorized to receive it for the intended recipient), you may not copy, forward, or otherwise use it, or disclose its contents to anyone else. If you have received this transmission in error, please notify me immediately and delete it from your system.

From: Daniel M. Alrick [mailto:dalrick@sonomatech.com]

Sent: Friday, June 08, 2012 7:07 PM **To:** Douglas Watson; Tom Gross **Cc:** Clinton MacDonald; Mary Jo Teplitz **Subject:** Exceptional Events Report

Tom and Doug,

The Exceptional Event Report and Appendix can be downloaded from STI's file server. All that remains to be done is for you to add a demonstration that the fires were not reasonable preventable in Section 3. STI can review your text if you like. Then we need to add a KDHE cover page and update the Table of Contents.

Finally, can we include an acknowledgement section in this document since authorship on the front cover is probably not appropriate in this case? We can discuss next week.

We really enjoyed working on this project. We hope you find that the report meets your needs.

Report - <u>Download</u> Appendix - <u>Download</u>

Best Regards,

Dan and Clint

Daniel Alrick
Meteorologist
Sonoma Technology, Inc.
1455 N. McDowell Blvd, Suite D
Petaluma, CA 94954
707-665-9900
www.sonomatech.com